

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for detecting a high flying condition in a disk drive, comprising:

providing a disk surface having a track, said track including a plurality of AGC fields each corresponding with at least one data sector in said track;

5 measuring an amplitude associated with each of said plurality of AGC fields, said amplitudes corresponding to flying heights of a transducer head over the disk surface at locations corresponding to said plurality of AGC fields;

storing values corresponding with said measured amplitudes onto said disk surface;

10 prior to writing data to a data sector in said track, measuring an amplitude associated with the AGC field that corresponds with said data sector and comparing said measured amplitude ~~an observed value derived from a signal corresponding to a flying height of a transducer head over a disk surface~~ to a stored value corresponding to the AGC field; and

15 generating a signal indicating a high flying condition if said comparison is unfavorable.

2. (original) The method of Claim 1, wherein said stored value comprises a reference value.

3. (original) The method of Claim 1, wherein said stored value comprises a reference value plus a marginal value.

4-8. (cancelled)

9. (currently amended) The method of Claim 1, wherein said stored value is stored on said disk surface in a ~~hard~~ servo sector associated with the AGC field.

10. (currently amended) The method of Claim 1, wherein said stored value is stored on said disk surface in a servo in data sector associated with the AGC field.

11. (currently amended) The method of Claim 1, wherein said stored value is stored on said disk surface in a data sector associated with the AGC field.

12. (currently amended) The method of Claim 1, wherein said comparison is unfavorable if said ~~observed~~ measured value is less than said stored value.

13. (original) The method of Claim 1, wherein said stored value encodes a numerical value.

14. (original) The method of Claim 2, wherein said reference value is derived from information stored on said disk.

15. (currently amended) A method for detecting whether a flying height of a transducer head over a disk surface in a disk drive exceeds a desired amount, said disk surface having a track, said track including a plurality of AGC fields each corresponding with at least one data sector in said track, said method comprising the steps of:

5 ~~selecting a~~ determining standard transducer head flying height numbers, wherein said standard transducer head flying height numbers ~~[[is]] are based on [[an]] measured amplitudes associated with each of said plurality of AGC fields of a signal derived from a selected item of data written to said disk;~~

10 storing said ~~selected~~ standard transducer head flying height numbers on said disk surface;

reading prior to writing data to a data sector in said track, determining an amplitude associated with the AGC field associated with said data sector of said signal derived from said selected item of data written to said disk to obtain an observed transducer head flying height number;

15 comparing said selected standard transducer head flying height number associated with said AGC field to said observed transducer head flying height number; and

 signaling a high fly write condition if said comparison indicates a high fly write event.

16. (currently amended) The method of Claim 15, wherein said step of ~~selecting a determining~~ standard transducer head flying height numbers ~~for a signal derived from a selected item of data written to said disk~~ comprises ~~reading an amplitude of a signal derived from said selected item of data and~~ setting said read measured amplitudes ~~derived~~

5 ~~from said standard transducer head~~ equal to said standard transducer head flying height numbers.

17. (currently amended) The method of Claim 15, wherein said step of ~~selecting a~~
determining standard transducer head flying height numbers ~~for a signal derived from a~~
~~selected item of data written to said disk~~ comprises:

~~reading an amplitude of a signal derived from said selected item of data;~~
5 adding a marginal value to said measured amplitudes; ~~and~~
~~setting said sum equal to~~ obtain said standard transducer head flying height
numbers.

18. (currently amended) The method of Claim 15, wherein said step of storing
said transducer head flying height numbers to said disk surface comprises storing said
numbers ~~in a hard~~ servo sectors of said disk surface.

19. (currently amended) The method of Claim 15, wherein said step of storing
said transducer head flying height numbers to said disk surface comprises storing said
numbers in a data sectors of said disk surface.

20. (currently amended) The method of Claim 19, wherein said data sectors [[is]]
are located in [[a]] customer data regions of said disk surface.

21. (currently amended) The method of Claim 15, wherein said step of ~~selecting a~~
determining standard transducer head flying height numbers is performed prior to
delivery of said disk drive to an end user.

22. (currently amended) The method of Claim 15, wherein said step of ~~selecting a~~
determining standard transducer head flying height numbers is performed prior to storing
customer data on said disk.

23-24. (cancelled)

25. (original) The method of Claim 15, wherein said step of comparing comprises
subtracting said observed transducer head flying height number from said standard
transducer head flying height number.

26. (original) The method of Claim 15, wherein a high fly write event is indicated
if said step of comparing results in a number that is positive.

27-34. (cancelled)

35. (new) The disk drive of Claim 1, wherein a plurality of amplitudes associated
with each of said plurality of AGC fields are measured and said stored values
corresponding with said measured amplitudes represent an average value associated with
each of the plurality of AGC fields.

36. (new) The disk drive of Claim 1, wherein amplitudes are measured for all of the AGC fields in said track.

37. (new) The disk drive of Claim 1, wherein amplitudes are measured for all of the AGC fields on the disk surface.

38. (new) A method for detecting a high flying condition in a disk drive, comprising:

providing a disk surface having a track, said track including a plurality of groups of servo bursts each corresponding with at least one data sector in said track;

5 measuring an amplitude associated with each of said plurality of groups of servo bursts, said amplitudes corresponding to flying heights of a transducer head over the disk surface at locations corresponding to said plurality of groups of servo bursts;

storing values corresponding with said measured amplitudes onto said disk surface; and

10 prior to writing data to a data sector in said track, measuring an amplitude associated with the group of servo bursts that correspond with said data sector and comparing said measured amplitude to a stored value corresponding to the group of servo bursts.

39. (new) A method for detecting a high flying condition in a disk drive, comprising:

providing a disk surface having a track, said track including a plurality of ERC fields each corresponding with at least one data sector in said track;

5 measuring an amplitude associated with each of said plurality of ERC fields, said amplitudes corresponding to flying heights of a transducer head over the disk surface at locations corresponding to said plurality of ERC fields;

 storing values corresponding with said measured amplitudes onto said disk surface; and

10 prior to writing data to a data sector in said track, measuring an amplitude associated with the ERC field that corresponds with said data sector and comparing said measured amplitude to a stored value corresponding to the ERC field.